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technician, the central processing unit 24 preferably utilizes software templates displayed on the video monitor 36 to eliminate, or at least minimize, the entry of redundant or repetitive information by the technician.

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Please delete pages 10-15 corresponding to Appendix A.

IN THE CLAIMS:

Please add new claims 10-28 as follows:

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1 10. (New) A process for analyzing crystal growth comprising the steps of:
2 positioning a crystal tray well within a focal window of the video camera;
3 generating an output signal from said video camera, said signal representing an
4 image of said crystal tray well;
5 acquiring said output signal in a central processing unit;
6 storing said output signal in a first data storage device;
7 inputting crystal relevant parameters to said central processing unit;
8 storing said crystal relevant parameters to a second data storage device; and
9 correlating said crystal relevant parameters and said output signal stored within
10 said first data storage device with an index or a pointer.

1 11. (New) The process of claim 10 wherein said crystal tray well is
2 positioned within the focal window of said video camera by a movable stage driven by a
3 motorized mechanism.

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1 12. (New) The process of claim 11 wherein said stage supports a plurality of
2 trays wherein each of said plurality of trays has a plurality of said crystal tray wells
3 therein.

1 13. (New) The process of claim 11 wherein said motorized mechanism is
2 under activation control of said central processing unit.

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1 14. (New) The process of claim 10 further comprising back light
2 illuminating said crystal tray well.

1 15. (New) The process of claim 14 wherein said central processing unit
2 controls a lighting parameter selected from the group consisting of: intensity, presence
3 of light, and angle of polarization.

1 16. (New) The process of claim 10 wherein said data storage device is a
2 removable data storage medium.

1 17. (New) The process of claim 10 wherein said first data storage device and
2 said second data storage device are the same device.

1 18. (New) The process of claim 10 further comprising the step of data
2 compressing said output signal prior to storing said output signal.

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1 19. (New) The process of claim 10 further comprising the step of digitally
2 filtering said output signal prior to storing said output signal.

1 20. (New) The process of claim 10 wherein said crystal relevant
2 parameters are input into a template.

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1 21. (New) The process of claim 10 wherein said crystal relevant
2 parameters include at least one parameter of the group consisting of: crystal specimen
3 pH, crystal specimen temperature, crystal specimen protein type, detergents present,
4 additives present, preservatives present, reservoir buffer present, reservoir buffer
5 concentration, reservoir buffer pH, crystal specimen volume, notes, crystal specimen
6 score, and crystal specimen drop descriptor.

1 22. (New) The process of claim 10 further comprising the step of scoring
2 said output image as a crystal image score.

1 23. (New) The process of claim 22 further comprising storing said crystal
2 image score as part of said crystal relevant parameters.

1 24. (New) The process of claim 22 wherein scoring comprises the steps
2 of:
3 T-square filtering said output image;
4 low pass filtering said output image;
5 digitally filling image gaps in said output signal; and

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6 assigning said crystal image score.

1 25. (New) The process of claim 22 wherein said crystal image score is
2 determined based on a condition selected from the group consisting of: crystal edge
3 straightness, crystal defects, crystal fractures, protein crystal count, crystal perimeter
4 symmetry, crystal perimeter roughness, and center of gravity.

1 26. (New) An improved process for acquiring, storing and evaluating
2 crystal growth involving collecting and storing an image of a crystal growth well and
3 relating the image to the crystal specimen being evaluated wherein the improvement
4 lies in: storing the crystal growth well image in a relational manner to crystal growth
5 parameters within a data storage media.

1 27. (New) The improved process of claim 36 further comprising the
2 improvement of: relating crystal growth parameters stored in a database to crystal
3 growth well image stored on a removable data storage media with an index or record
4 pointer.

1 28. (New) A crystal growth analysis obtained by the process of claim 10.

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